



ENTERED

PCT09

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/937,862A

DATE: 03/07/2002
 TIME: 15:23:26

P16

Input Set : A:\14114.0353U2.TXT
 Output Set: N:\CRF3\03072002\I937862A.raw

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4 <110> APPLICANT: Oberste, M. Steven
5 Maher, Kajja
6 Kilpatrick, David R.
7 Pallansch, Mark A.
10 <120> TITLE OF INVENTION: TYPING OF HUMAN NON-POLIO ENTEROVIRUSES
13 <130> FILE REFERENCE: 14114.0353U2
15 <140> CURRENT APPLICATION NUMBER: 09/937,862A
C--> 16 <141> CURRENT FILING DATE: 2002-02-14
18 <150> PRIOR APPLICATION NUMBER: PCT/US00/07828
19 <151> PRIOR FILING DATE: 2000-03-24
21 <150> PRIOR APPLICATION NUMBER: 60/127,464
22 <151> PRIOR FILING DATE: 1999-03-31
24 <160> NUMBER OF SEQ ID NOS: 86
26 <170> SOFTWARE: FastSEQ for Windows Version 4.0
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 20
30 <212> TYPE: DNA
31 <213> ORGANISM: Artificial Sequence
33 <220> FEATURE:
34 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
35 synthetic construct
38 <400> SEQUENCE: 1
39 gcrtgcaatg ayttctcwgt
41 <210> SEQ ID NO: 2
42 <211> LENGTH: 18
43 <212> TYPE: DNA
44 <213> ORGANISM: Artificial Sequence
46 <220> FEATURE:
47 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
48 synthetic construct
W--> 51 <221> NAME/KEY: misc_feature
52 <222> LOCATION: (1)...(18)
53 <223> OTHER INFORMATION: n = a, t, c or g
W--> 55 <400> 2
W--> 56 ngcnccdgat tgntgscc
58 <210> SEQ ID NO: 3
59 <211> LENGTH: 20
60 <212> TYPE: DNA
61 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:
64 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
65 synthetic construct
W--> 68 <221> NAME/KEY: misc_feature

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69 <222> LOCATION: (1)...(20)
70 <223> OTHER INFORMATION: n = a, t, c or g
W--> 72 <400> 3
W--> 73 gcnccngayt gntgnccraa 20
  75 <210> SEQ ID NO: 4
  76 <211> LENGTH: 20
  77 <212> TYPE: DNA
  78 <213> ORGANISM: Artificial Sequence
  80 <220> FEATURE:
  81 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
  82   synthetic construct
W--> 85 <221> NAME/KEY: misc_feature
  86 <222> LOCATION: (1)...(20)
  87 <223> OTHER INFORMATION: n = a, t, c or g
W--> 89 <400> 4
W--> 90 atgtaygtnc cnccnnggg 20
  92 <210> SEQ ID NO: 5
  93 <211> LENGTH: 20
  94 <212> TYPE: DNA
  95 <213> ORGANISM: Artificial Sequence
  97 <220> FEATURE:
  98 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
  99   synthetic construct
W--> 102 <221> NAME/KEY: misc_feature
  103 <222> LOCATION: (1)...(20)
  104 <223> OTHER INFORMATION: n = a, t, c or g
W--> 106 <400> 5
W--> 107 ggngcrttnc cytcngrcca 20
  109 <210> SEQ ID NO: 6
  110 <211> LENGTH: 20
  111 <212> TYPE: DNA
  112 <213> ORGANISM: Artificial Sequence
  114 <220> FEATURE:
  115 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
  116   synthetic construct
W--> 119 <221> NAME/KEY: misc_feature
  120 <222> LOCATION: (1)...(20)
  121 <223> OTHER INFORMATION: n = a, t, c or g
W--> 123 <400> 6
W--> 124 acrtgncnng tytgcatngt 20
  126 <210> SEQ ID NO: 7
  127 <211> LENGTH: 18
  128 <212> TYPE: DNA
  129 <213> ORGANISM: Artificial Sequence
  131 <220> FEATURE:
  132 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
  133   synthetic construct
W--> 136 <221> NAME/KEY: misc_feature
  137 <222> LOCATION: (1)...(18)

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138 <223> OTHER INFORMATION: n = a, t, c or g
 W--> 140 <400> 7
 W--> 141 awnttytayg ayggntgg 18
 143 <210> SEQ ID NO: 8
 144 <211> LENGTH: 20
 145 <212> TYPE: DNA
 146 <213> ORGANISM: Artificial Sequence
 148 <220> FEATURE:
 149 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
 150 synthetic construct
 W--> 153 <221> NAME/KEY: misc_feature
 154 <222> LOCATION: (1)...(20)
 155 <223> OTHER INFORMATION: n = a, t, c or g
 W--> 157 <400> 8 20
 W--> 158 tananngtnc ccatrtrtt
 160 <210> SEQ ID NO: 9
 161 <211> LENGTH: 20
 162 <212> TYPE: DNA
 163 <213> ORGANISM: Artificial Sequence
 165 <220> FEATURE:
 166 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
 167 synthetic construct
 W--> 170 <221> NAME/KEY: misc_feature
 171 <222> LOCATION: (1)...(20)
 172 <223> OTHER INFORMATION: n = a, t, c or g
 W--> 174 <400> 9
 W--> 175 atgtayrtnc cnmcngngc 20
 177 <210> SEQ ID NO: 10
 178 <211> LENGTH: 20
 179 <212> TYPE: DNA
 180 <213> ORGANISM: Artificial Sequence
 182 <220> FEATURE:
 183 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
 184 synthetic construct
 W--> 187 <221> NAME/KEY: misc_feature
 188 <222> LOCATION: (1)...(20)
 189 <223> OTHER INFORMATION: n = a, t, c or g
 W--> 191 <400> 10
 W--> 192 ggnggngggt cngtnakytt 20
 194 <210> SEQ ID NO: 11
 195 <211> LENGTH: 20
 196 <212> TYPE: DNA
 197 <213> ORGANISM: Artificial Sequence
 199 <220> FEATURE:
 200 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
 201 synthetic construct
 W--> 204 <221> NAME/KEY: misc_feature
 205 <222> LOCATION: (1)...(20)
 206 <223> OTHER INFORMATION: n = a, t, c or g

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Input Set : A:\14114.0353U2.TXT

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W--> 208 <400> 11
 W--> 209 gangaraayc tnatngarac 20
 211 <210> SEQ ID NO: 12
 212 <211> LENGTH: 19
 213 <212> TYPE: DNA
 214 <213> ORGANISM: Artificial Sequence
 216 <220> FEATURE:
 217 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
 218 synthetic construct
 W--> 221 <221> NAME/KEY: misc_feature
 222 <222> LOCATION: (1)...(19)
 223 <223> OTHER INFORMATION: n = a, t, c or g
 W--> 225 <400> 12
 W--> 226 cccatnakrt cnatrtccc 19
 228 <210> SEQ ID NO: 13
 229 <211> LENGTH: 20
 230 <212> TYPE: DNA
 231 <213> ORGANISM: Artificial Sequence
 233 <220> FEATURE:
 234 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
 235 synthetic construct
 W--> 238 <221> NAME/KEY: misc_feature
 239 <222> LOCATION: (1)...(20)
 240 <223> OTHER INFORMATION: n = a, t, c or g
 W--> 242 <400> 13
 W--> 243 gtrctyacna nnagrrtcyct 20
 245 <210> SEQ ID NO: 14
 246 <211> LENGTH: 19
 247 <212> TYPE: DNA
 248 <213> ORGANISM: Artificial Sequence
 250 <220> FEATURE:
 251 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
 252 synthetic construct
 W--> 255 <221> NAME/KEY: misc_feature
 256 <222> LOCATION: (1)...(19)
 257 <223> OTHER INFORMATION: n = a, t, c or g
 W--> 259 <400> 14 19
 260 tsaarytgca aargacac
 262 <210> SEQ ID NO: 15
 263 <211> LENGTH: 18
 264 <212> TYPE: DNA
 265 <213> ORGANISM: Artificial Sequence
 267 <220> FEATURE:
 268 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
 269 synthetic construct
 W--> 272 <221> NAME/KEY: misc_feature
 273 <222> LOCATION: (1)...(18)
 274 <223> OTHER INFORMATION: n = a, t, c or g
 W--> 276 <400> 15

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Input Set : A:\14114.0353U2.TXT
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277 stgycagat ttcagtgt          18
279 <210> SEQ ID NO: 16
280 <211> LENGTH: 20
281 <212> TYPE: DNA
282 <213> ORGANISM: Artificial Sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
286 synthetic construct
W--> 289 <221> NAME/KEY: misc_feature
290 <222> LOCATION: (1)...(20)
291 <223> OTHER INFORMATION: n = a, t, c or g
W--> 293 <400> 16
W--> 294 ggnacncayr tnathggga      20
296 <210> SEQ ID NO: 17
297 <211> LENGTH: 20
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
303 synthetic construct
W--> 306 <221> NAME/KEY: misc_feature
307 <222> LOCATION: (1)...(20)
308 <223> OTHER INFORMATION: n = a, t, c or g
W--> 310 <400> 17
W--> 311 gccntrttnt grtgncraa      20
313 <210> SEQ ID NO: 18
314 <211> LENGTH: 20
315 <212> TYPE: DNA
316 <213> ORGANISM: Artificial Sequence
318 <220> FEATURE:
319 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
320 synthetic construct
W--> 323 <221> NAME/KEY: misc_feature
324 <222> LOCATION: (1)...(20)
325 <223> OTHER INFORMATION: n = a, t, c or g
W--> 327 <400> 18
W--> 328 ggnacncayr tnrtntggga      20
330 <210> SEQ ID NO: 19
331 <211> LENGTH: 20
332 <212> TYPE: DNA
333 <213> ORGANISM: Artificial Sequence
335 <220> FEATURE:
336 <223> OTHER INFORMATION: Description of Artificial Sequence; Note =
337 synthetic construct
W--> 340 <221> NAME/KEY: misc_feature
341 <222> LOCATION: (1)...(20)
342 <223> OTHER INFORMATION: n = a, t, c or g
W--> 344 <400> 19
W--> 345 acngcngyng aracnggnca      20

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RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 1,4,13
Seq#:3; N Pos. 3,6,12,15
Seq#:4; N Pos. 9,12,15,18
Seq#:5; N Pos. 3,9,15
Seq#:6; N Pos. 6,8,9,18
Seq#:7; N Pos. 3,15
Seq#:8; N Pos. 3,5,6,9
Seq#:9; N Pos. 9,12,15,18
Seq#:10; N Pos. 3,6,12,15
Seq#:11; N Pos. 3,12,15
Seq#:12; N Pos. 6,12
Seq#:13; N Pos. 9,11,12
Seq#:16; N Pos. 3,6,12
Seq#:17; N Pos. 4,9,15
Seq#:18; N Pos. 3,6,12,15
Seq#:19; N Pos. 3,6,9,15,18
Seq#:20; N Pos. 3,6,9,15,18
Seq#:21; N Pos. 6,9,15,18
Seq#:22; N Pos. 2,5,8,11
Seq#:81; Xaa Pos. 3,5
Seq#:82; Xaa Pos. 3
Seq#:83; Xaa Pos. 3
Seq#:84; Xaa Pos. 7
Seq#:86; Xaa Pos. 2,3,7

2
3
0
1

VERIFICATION SUMMARY
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Input Set : A:\14114.0353U2.TXT
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L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:51 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:55 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:56 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:68 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:72 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:85 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:89 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:102 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:106 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:5
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:119 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:123 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:136 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:140 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:7
L:141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:153 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:157 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:8
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:170 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:174 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:9
L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:187 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:191 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:10
L:192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:204 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:208 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:11
L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:221 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:225 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:12
L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:238 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:242 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:13
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:255 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:259 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:14
L:272 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:276 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15
L:289 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:293 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16
L:294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:306 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:310 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:17
L:311 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:323 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

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L:327 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:18
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:340 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:344 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19
L:345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:357 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:361 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:20
L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:374 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:378 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:21
L:379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:391 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:395 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22
L:396 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:1972 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1976 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:81
L:1977 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0
L:1990 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1994 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:82
L:1995 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:0
L:2008 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:2012 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:83
L:2013 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:0
L:2026 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:2030 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:84
L:2031 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:0
L:2058 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:2062 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:86
L:2063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:0

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2